APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,106	11/28/2000	Francois Grieu	677-18	7675

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EXAMINER
MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 June 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-15</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1. This is in response to the amendment filed on 6 June 2006.

2. Claims 1-15 are pending in the application.

3. Claims 1-15 have been rejected.

Response to Arguments

4. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view

of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4, 5 and 11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Tailliet U.S. Patent No. 6,848,049 B1.

As to claim 1, Tailliet discloses a method of modifying the content of the non-volatile

memory of a microcircuit card, in particular a contactless microcircuit card [column 3, lines 20-

25], wherein the card is temporarily coupled to a terminal while a transaction is being executed,

in particular a remote ticketing transaction, the transaction including the terminal applying to the

card a plurality of modification commands, each command comprising at least one operation of

recording in the card memory a respective data item designated by the command, the various

data items recorded in this way being mutually interdependent, the method comprising the card

executing the steps of:

a) on receiving corresponding respective commands from the terminal,

modifying the contents of the card memory by provisionally recording in the card

memory each of the interdependent items of information without losing prior

values corresponding to the items [column 4, lines 39-59]; and

b) finalizing the modifications to the card memory by one of confirming

all of the modifications and by discarding all of the modifications, wherein for

subsequent operations, the commands executed in step a) will either all have been

taken into account, or else all of them will be without effect [column 5 line 50 to

column 6 line 10].

As to claim 4, Tailliet discloses an in-session mode. Tailliet discloses an out-of-session

mode in which the makings of recordings are not confirmed [column 5 line 50 to column 6 line

10].

As to claim 5, Tailliet discloses an authentication function combined with the function of

finalizing step [column 5 line 50 to column 6 line 10]. Tailliet discloses data to be discarded in

the event of authentication failing [column 6, lines 11-34].

As to claim 11, Tailliet discloses an optional inhibit attribute that if the card executes

such a command in-session the modifications performed by the command take effect

independently [column 5 line 50 to column 6 line 10].

As to claim 12, Tailliet discloses that the terminal executes an action following

confirmation by the card [column 5 line 50 to column 6 line 10]. Tailliet discloses that in the

event of the action being properly performed by the terminal, ratification information is recorded

in the card suitable for subsequent accessing by reading [column 5 line 50 to column 6 line 10].

As to claim 13, Tailliet discloses that the recording command is an implicit command

[column 5 line 50 to column 6 line 10]. Tailliet discloses that any command received by the card

is interpreted as an order for recording ratification information in the card [column 5 line 50 to

column 6 line 10].

As to claim 14, Tailliet discloses that after the modifying step a) and prior to the

finalizing step b), any interruption in operation of the card results in the cancellation of the

modifications in the modifying step a) and return of the values of the interdependent items of

information of the card memory to their prior values [column 4, lines 39-59].

As to claim 15, Tailliet discloses that the cancellation step occurs when the card is next

coupled to a terminal [column 4, lines 39-59].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tailliet

U.S. Patent No. 6,848,049 B1 as applied to claim 1 above, and further in view of Fujisaki

U.S. Patent No. 4,877,945.

As to claims 2 and 3, Tailliet does not teach a flag confirming proper execution is

recorded in the memory of the card. Tailliet does not teach that when the card subsequently

receives a command requiring at least one of the data items written or the value corresponding thereto to be read and/or modified. Tailliet does not teach that the card begins by examining the state of the flag, and if it has not been recorded, the card ignores or cancels the provisional recordings previously made and executes the command on the basis of the prior values corresponding to the data items. Tailliet does not teach that when the card examines the state of the flag, and if the flag has been recorded, the card executes operations for copying the provisional writes.

Fujisaki teaches a flag confirming proper execution is recorded in the memory of a card. Fujisaki teaches that when the card subsequently receives a command requiring at least one of the data items written or the value corresponding thereto to be read and/or modified, the card begins by examining the state of the flag, and if it has not been recorded, the card ignores or cancels the provisional recordings previously made and executes the command on the basis of the prior values corresponding to the data items. Fujisaki teaches that when the card examines the state of the flag, and if the flag has been recorded, the card executes operations for copying the provisional writes [column 2, lines 10-56].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet so that a flag confirmed proper execution was recorded in the memory of the card. When the card subsequently received a command requiring at least one of the data items written or the value corresponding thereto to be read and/or modified, the card would have examined the state of the flag, and if it had not been recorded, the card ignored or cancelled the provisional recordings previously made and executed the command on the basis of the prior values corresponding to the data items. When the card

examined the state of the flag, and if the flag had been recorded, the card executed operations for copying the provisional writes.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet by the teaching of Fujisaki because it lets the operator know that data recording in the memory is hindered and it excludes erroneous recording on the card [column 1 line 65 to column 2 line 2].

7. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tailliet U.S. Patent No. 6,848,049 B1 as applied to claim 1 above, and further in view of Ohashi et al U.S. Patent No. 5,761,309.

As to claims 7 and 9, Tailliet does not teach that when the card receives from the terminal commands for modifying the content of the memory that it includes verification of a cryptographic certificate. Tailliet does not teach that the verification is performed if the command is received out-of-session, and it is not performed if the command is received in-session. Tailliet does not teach that the authentication is performed by the card which authenticates the terminal and the card. Tailliet does not teach the card checking a cryptographic certificate produced by the terminal and transmitted to the card. Tailliet does not teach confirming the modifications in step b) only if the certificate is recognized as being correct.

Ohashi et al teaches when a card that receives from the terminal commands for modifying the content of the memory that it includes verification of a cryptographic certificate. Ohashi et al teaches that the verification is performed if the command is received out-of-session, and it is not performed if the command is received in-session authentication is performed by the card which

authenticates the terminal and the card. Ohashi et al teaches the card checking a cryptographic certificate produced by the terminal and transmitted to the card [column 6, lines 13-40].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet so that when a card that received from the terminal commands for modifying the content of the memory that it included verification of a cryptographic certificate. The verification would have been performed if the command was received out-of-session, and it was not performed if the command is received in-session. The card would have verified the certificate of the terminal. The modifications would not take place unless the certificate has been verified.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet by the teaching of Ohashi et al because it provides a high level of confidentiality when secret information is transmitted [column 1 line 61 to column 2 line 7].

8.   Claims 6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tailliet U.S. Patent No. 6,848,049 B1 as applied to claim 1 above, and further in view of Vanstone U.S. Patent No. 6,178,507 B1.

As to claims 6, 8 and 10, Tailliet does not teach that the authentication is performed by the card that authenticates the terminal and/or the data interchanged between the terminal and the card. Tailliet does not teach the card checking a cryptographic certificate produced by the terminal and transmitted to the card, and confirming the modifications only if the certificate is recognized as being correct. Tailliet does not teach that the authentication is performed by the terminal that authenticates the card and/or the data interchanged between the terminal and the

card. Tailliet does not teach that the card produces and transmits a cryptographic certificate in conditional manner to the terminal, if and only if the modifications have been confirmed.

Vanstone teaches mutual authentication between a terminal and a smart card using certificates [column 3 line 37 to column 4 line 37].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet so that the terminal and the smart card would have mutually authenticated themselves before an transaction took place.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Tailliet by the teaching of Vanstone because it ensures that transactions take place on a trusted smart card as well as a trusted terminal.
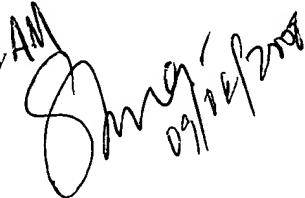
Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aravind K Moorthy
September 5, 2006